

I claim:

1. Wheelbarrow braking system for controlling speed of a wheelbarrow comprising a braking mechanism for a wheelbarrow with handle bars and a wheel comprising a drum brake, a brake assembly for the wheel, a control handle, a control cable coupling the brake assembly and the control handle for activating the braking mechanism and controlling movement of the wheelbarrow.

2. The system of claim 1, wherein the braking mechanism comprises a drum assembly and a pair of spring-loaded brake shoes mounted inside the drum assembly.

3. The system of claim 2, wherein the drum assembly is a steel drum assembly.

4. The system of claim 2, wherein the drum assembly comprises a plastic drum with a steel liner.

5. The system of claim 2, wherein the drum assembly further comprises a drum and an enclosure for sealing and protecting the drum from external material.

6. The system of claim 5, further comprising a mounting plate for the drum and connectors for mounting the plate to a rim of the wheel.

7. The system of claim 6, wherein the connectors are bolt or weld connectors.

8. The system of claim 5, further comprising an axle supporting wheels of the wheelbarrow, wherein the drum is mounted centrally on the axle between the wheels.

9. The system of claim 1, wherein the control handle is a twist-type motorcycle handle mounted at an end of the handle bars of the wheelbarrow.

cont. as
10. The system of claim 10, wherein the control handle twists to different degrees for activating the braking mechanism without losing contact with the handle bars of the wheelbarrow during braking.

11. The system of claim 10, wherein a slight twist of the handle slows the wheelbarrow.

12. The system of claim 10, wherein a quarter twist of the handle stops the wheelbarrow.

13. The system of claim 10, wherein an amount of force exerted upon the control handle is directly proportional to a degree of pressure exerted by the braking mechanism on the wheel of the wheelbarrow.

14. The system of claim 10, further comprising clipping means for locking the control handle at desired positions after twisting the handle.

15. The system of claim 14, wherein the clipping means forms a parking brake for the wheelbarrow by locking the control handle.

Sub C1
16. The system of claim 1, wherein the cable is a steel brake cable.

Sub C1
17. The system of claim 1, further comprising a large pitch screw on an end of the control cable, wherein the *pitch* bearing screw is freely movable in opposite directions.

18. The system of claim 17, wherein the bearing screw is in is spring loaded in a brake releasing direction.

19. The system of claim 1, wherein the brake assembly comprises caliper brakes.

20. The system of claim 19, wherein the brake assembly further comprises a brake pad and wherein the caliper brakes act upon the brake pad for friction-controlling a movement of the wheelbarrow.

21. The system of claim 20, further comprising a brace spanning the wheel of the wheelbarrow, wherein the caliper brakes engage opposite sides of the wheel.

22. The system of claim 20, wherein the control cable controls engagement of the caliper brakes.

23. The system of claim 22, wherein the control handle is a twist-type handle, and wherein the control cable couples the twist-type handle to the caliper brakes.

24. The system of claim 1, wherein the braking mechanism comprises a disc brake.

25. The system of claim 24, wherein the disc brake comprises a frame mounted caliper, and a disc mounted on the wheel of the wheelbarrow, wherein the caliper acts upon the disc for slowing the wheelbarrow by friction.

26. The system of claim 25, wherein the control handle is a twist-type handle, and wherein the control cable connects the handle and the frame mounted caliper, thereby controlling engagement of the frame mounted caliper with the wheel.

*Cancel
re 7/1a
CAB*

27. The system of claim 1, wherein the ~~wheelbarrow~~
comprises two wheels and a box from which project the handlebars
for lifting and steering the wheelbarrow.

sbast

28. The system of claim 27, further comprising an axle for
supporting the two wheels of the wheelbarrow, and a drum brake
mounted in a center of the axle for simultaneously controlling
rotation of the two wheels.

*Cancel
re 7a
CAB*

29. The system of claim 1, wherein the ~~wheelbarrow further~~
comprises a frame, a box on the frame, wherein the handlebars
extend from the box and the control handle is coupled to an end
of the handlebars.

*sub
C3*

30. The system of claim 29, wherein the box has extensions
for supporting the wheel, and wherein the control cable couples
the control handle to the brake assembly for controlling a
movement of the wheel.

31. Braking apparatus comprising a braking mechanism
including a brake, a twist-type handle and a brake cable
connecting the twist-type handle and the brake, wherein the
handle is twistable to a plurality of positions for controlling
speeds of movement of vehicles coupled to the braking mechanism.

32. The apparatus of claim 31, wherein a twist of the
handle slows the vehicles.

33. The apparatus of claim 31, wherein a quarter turn of
the handle stops the vehicles.

34. The apparatus of claim 31, wherein an amount of force exerted upon the handle is directly proportional to a degree of pressure exerted by the brake.

35. The apparatus of claim 31, further comprising a clipper for locking the handle at desired positions.

36. The apparatus of claim 35, wherein the clipper forms a parking brake.

37. The apparatus of claim 31, further comprising a pitch screw on an end of the cable movable freely in different directions.

38. The apparatus of claim 37, wherein the screw is spring loaded in a brake releasing direction.

39. The apparatus of claim 31, wherein the brake is a drum brake.

40. The apparatus of claim 39, further comprising a brake arm connecting the brake cable to the drum brake.

41. The apparatus of claim 40, further comprising an internal drum mounted on a fixed rim of a wheel.

42. The apparatus of claim 39, further comprising a backing plate for the drum brake and spring-loaded brake shoes mounted on the backing plate, wherein the brake cable controls engagement of the drum brake with the wheels.

43. The apparatus of claim 31, wherein the brake is a frame mounted caliper having a wheel disc assembly.

44. The apparatus of claim 43, further comprising a disc coupled to the wheel disc assembly for engaging the wheels and reducing movement speeds by friction.

45. The apparatus of claim 31, wherein the vehicles include a wheelbarrow.

All set

099999-070501